Lab Assignment

Cybersecurity Professional Program

Introduction to Python for Security

Introduction to Programming

PY-01-L2
Comments & Print

Lab Objective

Learn how to write a program that prints messages to the screen.

Lab Mission

Use Python to build your first program that will print a string to the console.

Lab Duration

10–15 minutes

Requirements

- Basic knowledge of PyCharm

Resources

- Environment and tools
  - Windows
    - Python 3
    - PyCharm

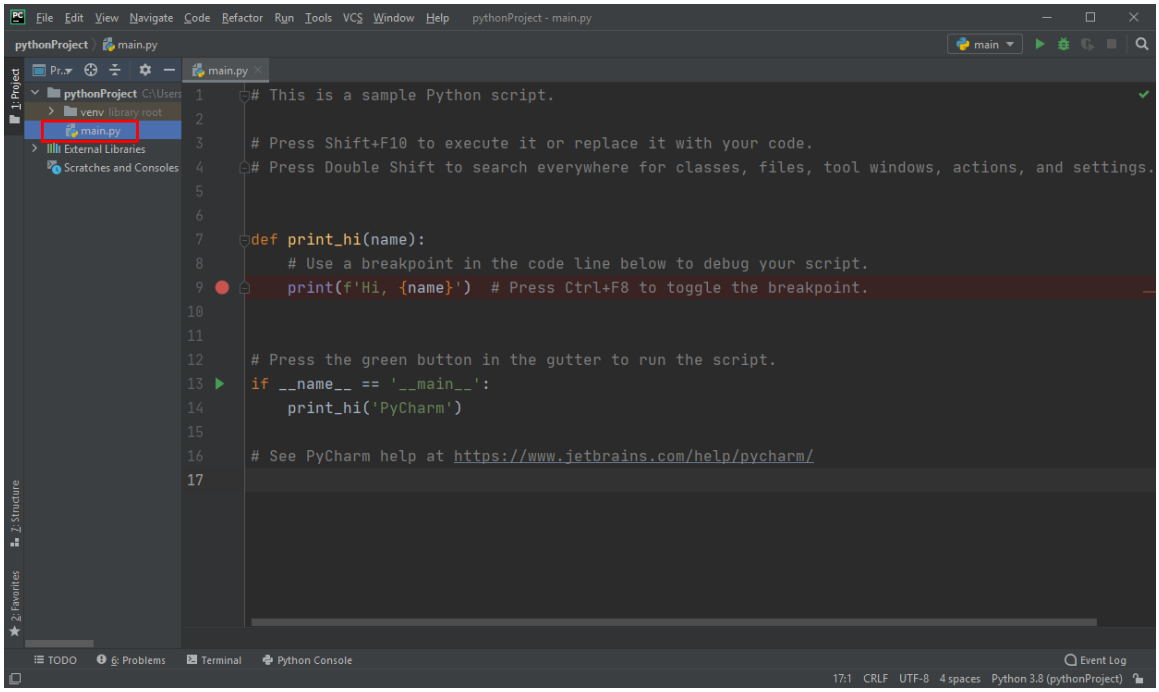
Textbook References

- Chapter 1: Introduction to Programming
  - Section 4: Python Environment and PyCharm
  - Section 5: Basic Syntax

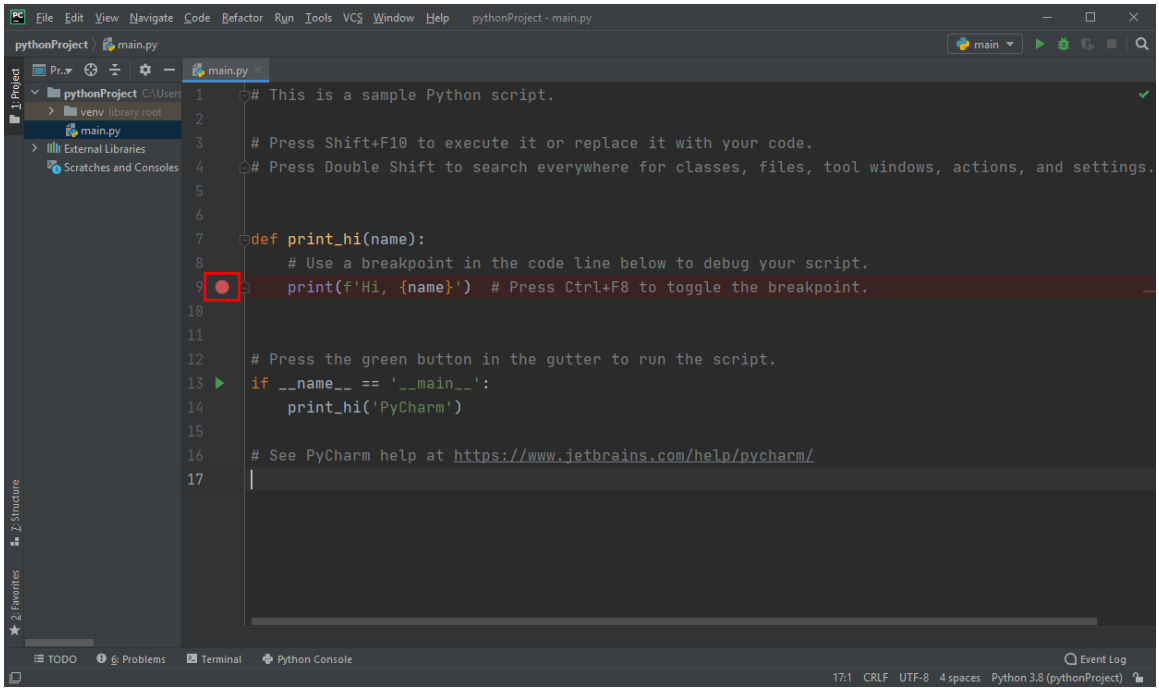
Lab Task 1: Become Familiar with Python Code

In the following task, you will experiment with the ***main.py*** file created by PyCharm.

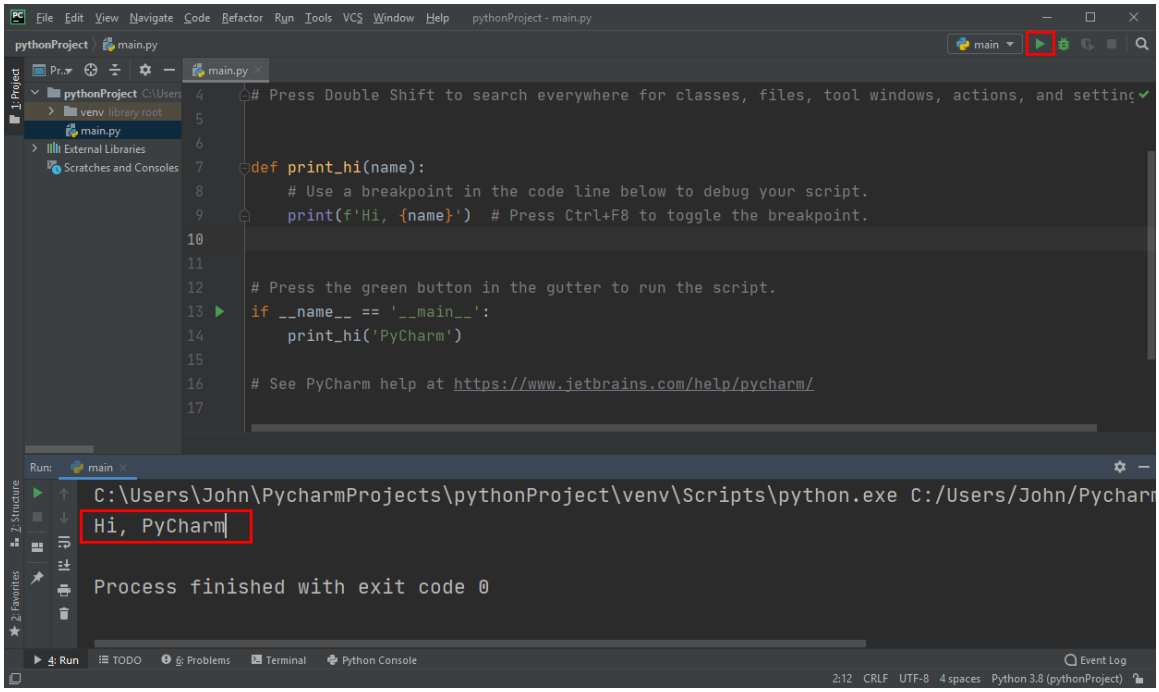
1 In PyCharm, click the ***main.py*** file to display it.



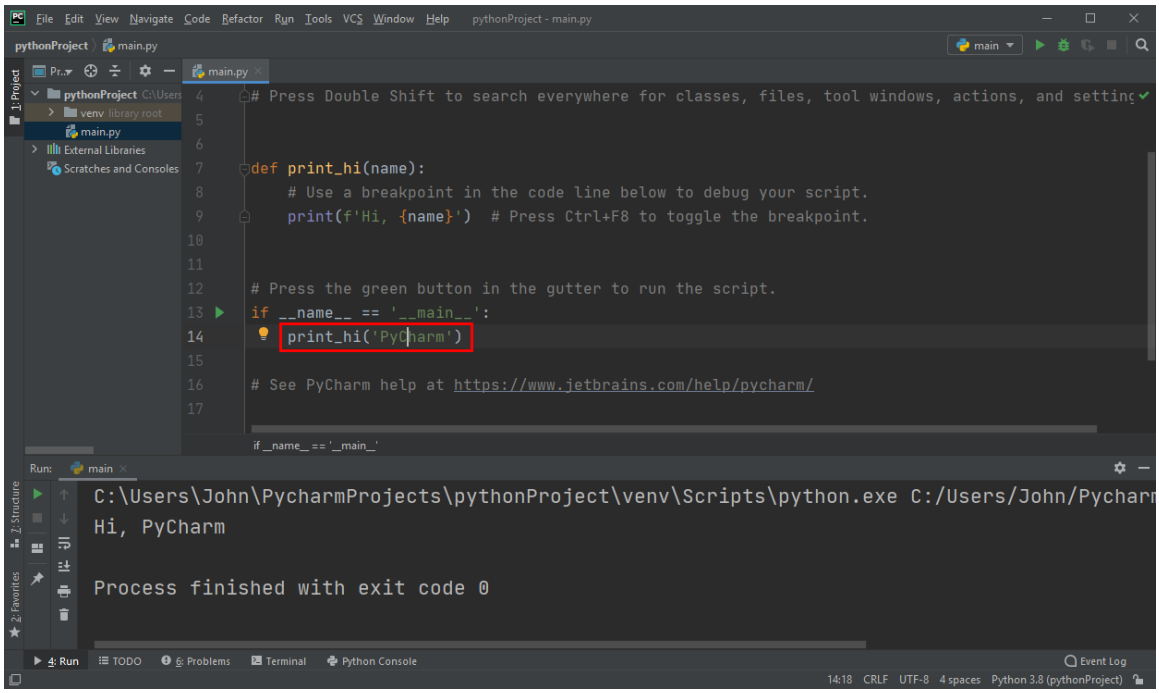
2 Click the red dot on line 9 to remove it (it is related to code debugging, which is not covered in the course).



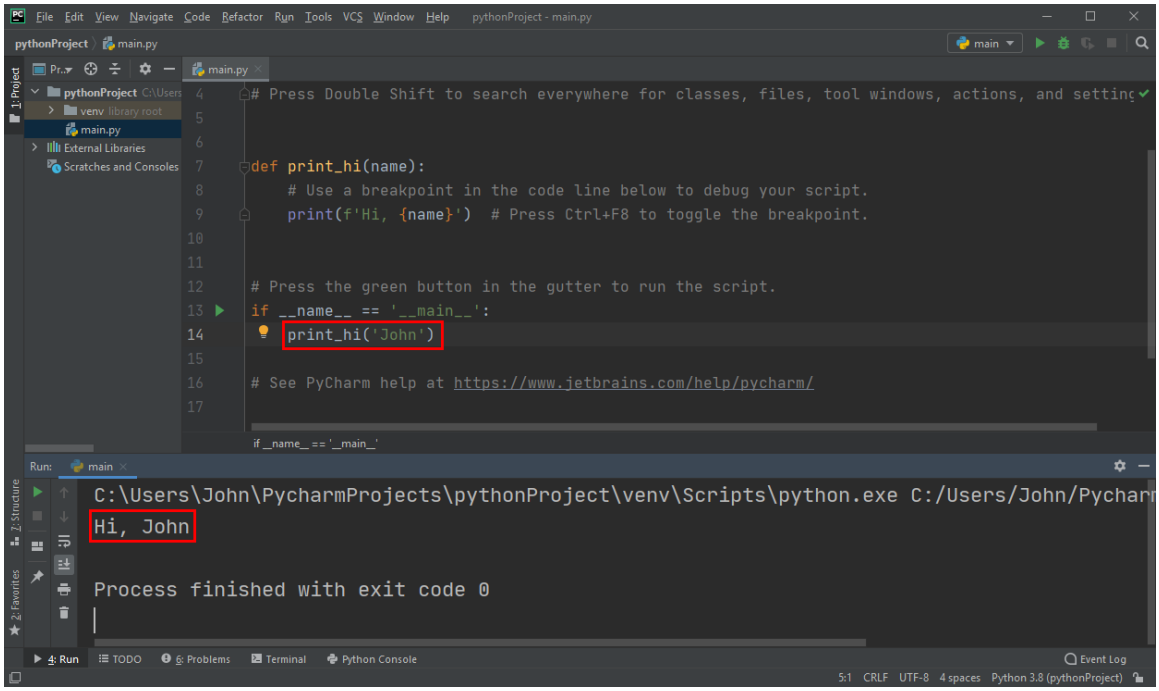
3 Execute the script by clicking the green arrow at the top left corner of the window. Note that the result of the execution is the text ***Hi, PyCharm***.



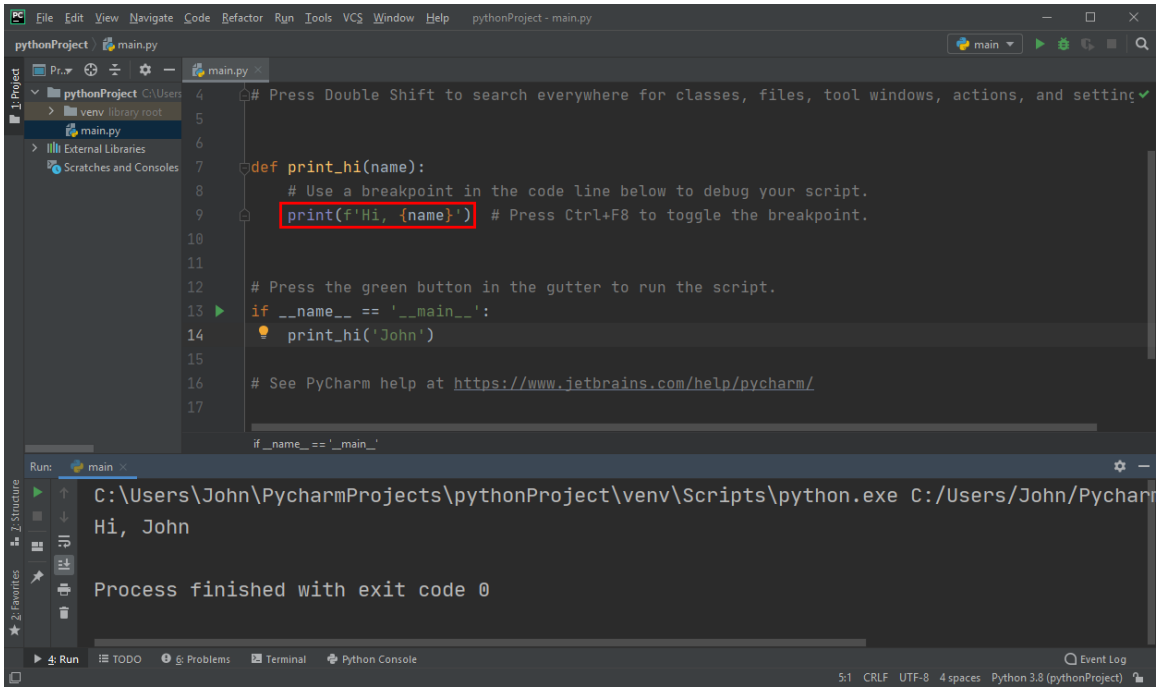
4 In the file, locate the word ***PyCharm*** and change it to your name.



5 Run the file again, and note that the output this time is your name.



6 Note that the word ***Hi*** is not in the same line as the name. Locate the word ***Hi*** in the file command that prints the text.

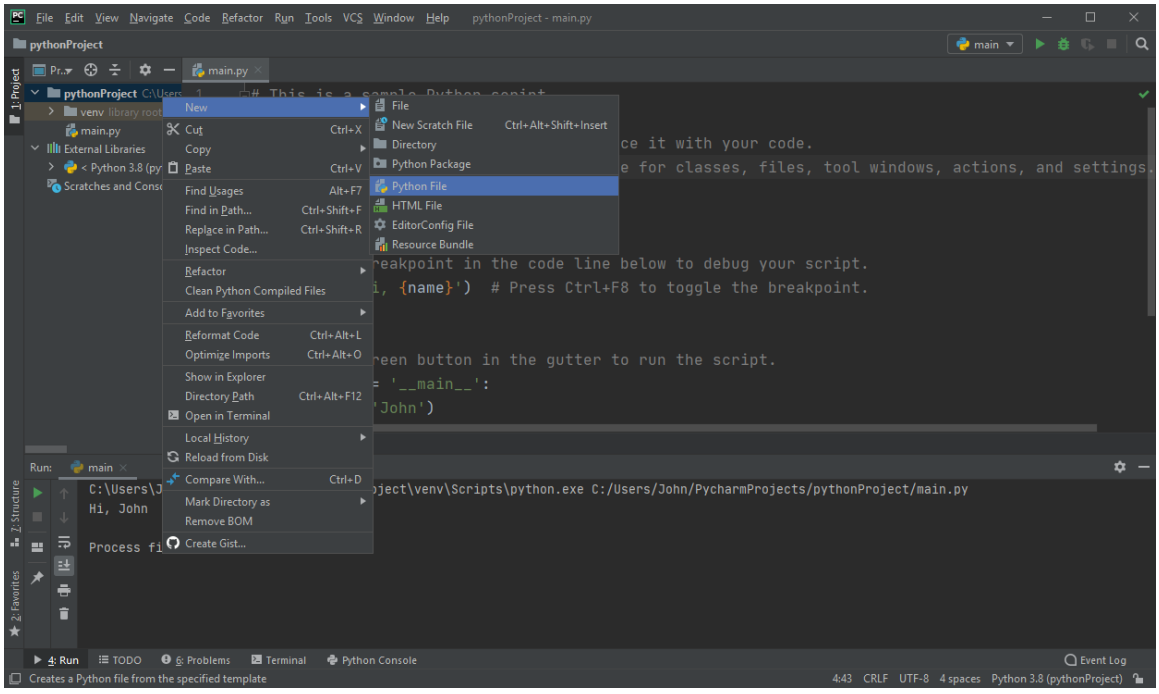


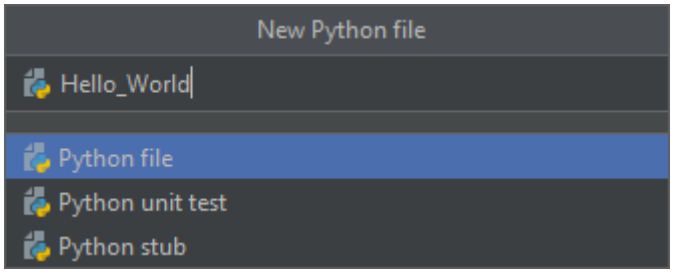
7 Think about the script's execution path. What do you think happens there?

Lab Task 2: Hello World!

In the following task, you will write your first lines of code, learn to use comments, and receive an output.

1 Create a new Python file and name it ***Hello_World***.



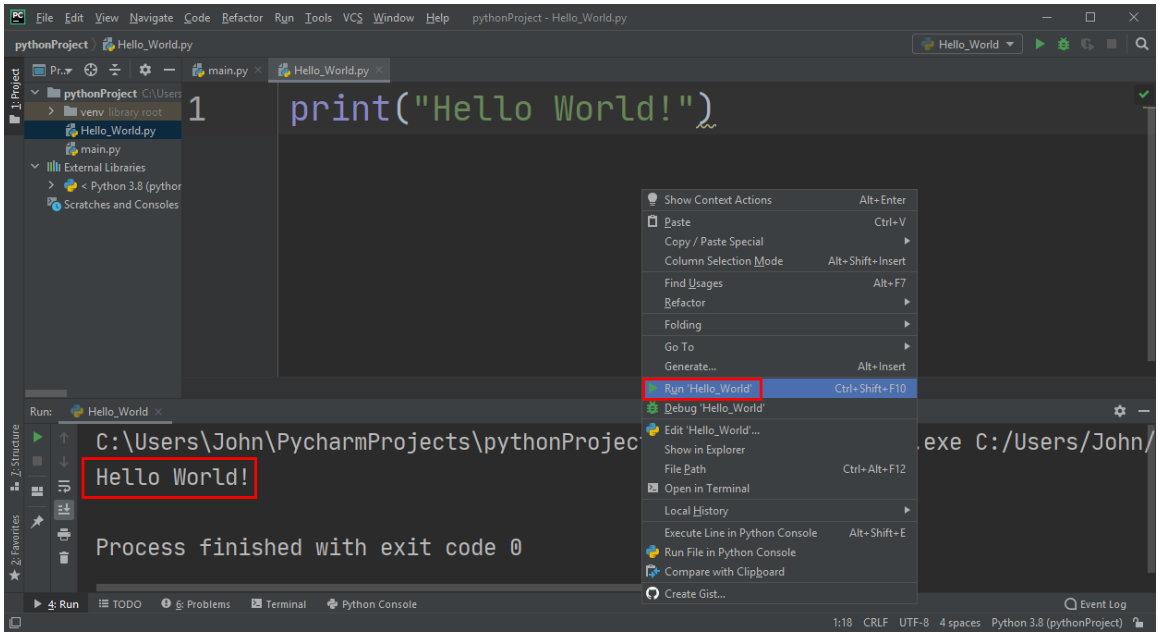


2 Write a command to print the text *Hello World!* using the ***print("Hello World!")*** function.

```
print("Hello World!")
```

3 Run the script by clicking the green arrow. Note that the output does not match the content of the file. What do you think happened?

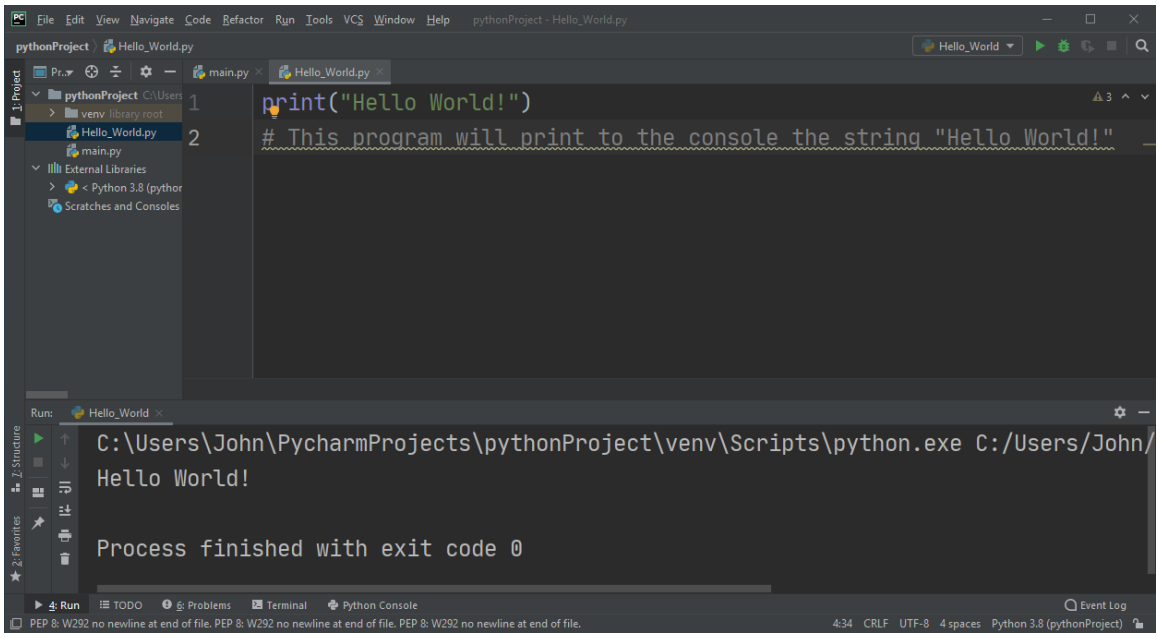
4 To make PyCharm execute the currently viewed file, right-click its content and select ***Run 'Hello_World'***.



5 Add a comment to the code using **#** with the following text after it:
This program will print to the console the string "Hello World!"

```
print("Hello World!")
# This program will print to the console the string "Hello World!"
```

6 Execute the file again and note that the content of the comment does not affect the output.



7 What are comments used for when writing scripts and programs?

8 Create a new file in the project and write a line of code to print the text *I'm a Programmer*. Use three quotation marks (***"""text"""***) to describe how to create a new Python file, and run it using ***Ctrl + Shift + F10***.